PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
Matth	ew Vacek et al.)	Examiner: Mark Graham
Serial No.:	09/883790)	Group Art Unit: 3711
Filed:	June 18, 2001)	Docket: 1470.001US1
For: COMPOSITE SOFTBALL BAT)	

APPELLANTS' BRIEF ON APPEAL

RECEIVED

APR 1 2 2004

TECHNOLOGY CENTER 3700

Sir:

Mail Stop Appeal Brief

P.O.Box 1450

Commissioner for Patents

Alexandria, VA 22313-1450

This Appeal Brief is presented in support of the Notice of Appeal filed on October 30, 2003, from the final rejection of claims 1-3 and 5-8 of the above-identified application, as set forth in the Final Office Action mailed May 1, 2003.

This Appeal Brief is being refilled pursuant to the Notification of Non-Compliance withi 37 CFR 1.192(c) mailed March 5, 2004.

The Appeal Brief is filed in triplicate. It is believed that no additional filing fee is required. However, any fee deemed to be due may be charged to Deposit Account 19-0743.

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

1. REAL PARTY IN INTEREST

The real party in interest of the above-captioned patent application is the assignee, MIKEN COMPOSITES, LLC by virtue of an assignment from the inventor to MIKEN COMPOSITES, LLC executed June 14, 2001 and recorded on June 18, 2001, Reel 011924, Frame 0043.

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant which will have a bearing on the Board's decision in the present appeal.

3. STATUS OF THE CLAIMS

Claims 1-3 and 5-16 are pending in this application. Claims 9-16 were withdrawn from further consideration. No claims are presently allowed. Claims 1-3 and 5-8 are presently rejected and are the subject of the present appeal. In an Advisory Action mailed October 8, 2003, the amendments to claims 5, 6 and 8 and newly submitted claims 17-29 added in the amendment after final were said to raise new issues that would require further consideration and/or search. The proposed amendment also presented additional claims without canceling a corresponding number of finally rejected claims. As a result, the proposed amendment after final was not entered in the Advisory Action dated October 8, 2003. Another amendment after final has been submitted in which claims 5, 6 and 8 are amended to the correct dependency of these claims from claim 4 (previously canceled) to claim 1. This amendment reduces the issues on appeal since claims 5, 6 and 8 are now sufficiently definite so as to overcome rejection under 35 USC § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention.

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

Page i Atty. Docket 1470.001US1



APPELLANT'S BRIEF ON APPEAL

TABLE OF CONTENTS

	<u>. </u>	age
1.	REAL PARTY IN INTEREST	2
2.	RELATED APPEALS AND INTERFERENCES	2
3.	STATUS OF THE CLAIMS	2
4.	STATUS OF AMENDMENTS	3
5.	SUMMARY OF INVENTION	3
6.	ISSUES PRESENTED FOR REVIEW	4
7.	GROUPING OF CLAIMS	4
8.	ARGUMENT	4
9.	SUMMARY	17
Δ1	PPENDIX I-The Claims on Anneal	18

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

4. STATUS OF AMENDMENTS

The claims are as amended in the Amendment after Final filed on a date even with this amendment.

5. SUMMARY OF INVENTION

A softball bat is made of a composite material (see p. 5, lines 4-7). The main portion of the bat includes a substantially tubular hitting surface 110 and a handle 120. A sleeve 112 is added within the hitting surface 110. A composite sleeve 112 is added within the body 140 of the bat and, more specifically, within the tubular hitting surface (see p. 5, lines 12-14). The sleeve 112 is made of composite material. The sleeve is also termed the inner sleeve (see p. 5, line 18). The inner sleeve 112 fits inside the hitting surface of the bat (see p. 5, lines 12-14). The hitting surface is also made of composite material (see p. 5, lines 16-17). The composite material has a lower density than metals used to make bats, such as aluminum or titanium and has a higher strength than aluminum and titanium and their alloys. Therefore, a bat having the same weight is stronger. The composite does not dent. Therefore more energy is transferred to the ball and since less energy is wasted on denting the bat or the inner sleeve 112, the bat 100 hits a ball farther than a wooden or metal bat (see p. 11, lines 12-22). The design parameters of a composite are more flexible so that either a more flexible or stiffer bat can be formed by varying the engineering parameters. The additional flexibility in using composite material allows designers to form bats with selected performance characteristics.

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

Page 4 Atty. Docket 1470.001US1

6. ISSUES PRESENTED FOR REVIEW

- 1. Whether claims 1, 2 and 6 are properly anticipated 35 USC § 102(b) by the Uke reference (U.S. Patent No. 5,303,917);
- 2. Whether claim 3 is obvious under 35 U.S.C. 103(a) over the Uke reference (U.S. Patent No. 5,303,917);
- 3. Whether claim 5 is obvious under 35 U.S.C. 103(a) over the Uke reference (U.S. Patent No. 5,303,917);
- 4. Whether claim 7 is obvious under 35 U.S.C. 103(a) over the Uke reference (U.S. Patent No. 5,303,917); and
- 5. Whether claim 8 is obvious under 35 U.S.C. 103(a) over the Uke reference (U.S. Patent No. 5,303,917).

7. GROUPING OF CLAIMS

The following claims are grouped together for purposes of this appeal: claims 1 and 2 and 6 are Group 1, claim 3 is Group 2, and claim 5 is Group 3, claim 7 is Group 4 and claim 8 is Group 5. Claims 1, 3, 5, 7 and 8 each stand alone.

8. ARGUMENT

- 1. Claims 1, 2 and 6 are not anticipated under 35 USC § 102(b) by the Uke reference (U.S. Patent No. 5,303,917). This argument is set forth in sections 8.2) and 8.3) of this appeal;
- 2. Claim 3 is not obvious under 35 U.S.C. 103(a) over the Uke reference (U.S. Patent No. 5,303,917). This argument is set forth in sections 8.5) and 8.6) of this appeal;
- 3. Claim 5 is not obvious under 35 U.S.C. 103(a) over the Uke reference (U.S. Patent No. 5,303,917). This argument is set forth in sections 8.5) and 8.7) of this appeal;

Page 5 Atty. Docket 1470.001US1

APPELLANTS' BRIEF ON APPEAL

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

4 Claim 7 is not obvious under 25 U.S.C. 103(a) over the Uke reference (U.S.

4. Claim 7 is not obvious under 35 U.S.C. 103(a) over the Uke reference (U.S. Patent No. 5,303,917). This argument is set forth in sections 8.5) and 8.8) of this appeal; and

5. Claim 8 is not obvious under 35 U.S.C. 103(a) over the Uke reference (U.S. Patent No. 5,303,917). This argument is set forth in sections 8.5) and 8.9) of this appeal.

Appellant submits that each of these arguments are valid based on the application of the applicable law as set forth below. The applicable law will be set forth once below and referred to specifically in the arguments set forth separately below. Each of the arguments will be made for each of the claim groups 1 through 5, as set forth in section 7 above.

8.1) The Examiner's 35 U.S.C. § 102(b) Rejection of Claims 1, 2 and 6 (Page 2 of Final Office dated May 1, 2003)

Claims 1, 2 and 6 were rejected under 35 USC § 102(b) as being anticipated by Uke (U.S. 5,303,917).

According to the Examiner, Uke at Col. 4, lines 11-14 specifically states that the handle may be made of nylon while the barrel is formed of "softer ABS/nylon alloy." These are "different" resins as required by Appellant's claims even though one constituent of the resin is common to both. Uke makes clear that various different resins may be used and that the barrel is to be made of a tougher though softer material. According to the Examiner, Uke also clearly advises the use of different fibers in the handle and barrel throughout his disclosure.

8.2) The Applicable Law

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. M.P.E.P. § 2131. To anticipate a claim, a reference must disclose every element of the challenged claim and enable one skilled in the art to make the anticipating subject matter. PPG Industries, Inc. V. Guardian

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

Page 6 Atty. Docket 1470.001US1

Industries Corp., 75 F.3d 1558, 37 USPQ2d 1618 (Fed. Cir. 1996). The identical invention must be shown in as complete detail as is contained in the claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

8.3) The Appellant's Argument regarding the Rejection under 35 U.S.C. § 102(b) of Group 1 (Claims 1, 2 and 6)

Claim 1 recites "...a sleeve force fit within the hitting surface, wherein the hitting surface and the sleeve are comprised of composite materials; wherein the hitting surface is made from a first set of fibers and a first resin and wherein the sleeve is made from a second set of fibers and a second resin, the second set of fibers and the second resin being different than the first set of fibers and first resin." The sleeve 60 of Uke is outside of inner member 58. According to Uke, the "...second or outer tubular member 60 is a protective sleeve which engages telescopically over the inner member 58..." (See column 6, lines 35-38). The identical invention must be shown in as complete detail as is contained in the claim. Uke fails to show the identical invention since a protective sleeve is positioned outside the inner member. The sleeve is not within the hitting surface as recited in claim 1.

In addition, the sleeve of Uke is not force fit within the hitting surface. According to Uke, "The outer and inner tubular members are prefereably secured together by a suitable siemflexible adhesive such as an epoxy resin..." (See column 7, lines 10-13 of Uke). Uke glues the two pieces together. "The adhesive may be painted onto the outer surface of member 58 in the appropriate areas before sliding the outer member into position over member 58 and allowing the adhesive to set." (See column 7, lines 13-17 of Uke)

In summary, the Uke reference relied upon by the Examiner fails to disclose each element as recited in claim 1. The Uke reference teaches a sleeve, but the sleeve is on the exterior of the hitting surface. The sleeve is also not force fit within the hitting surface but is

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

glued to the exterior of the hitting surface. Accordingly, appellant believes that the Examiner's rejection of claim 1 improper since the Uke reference fails to show all the elements of claim 1 and also fails to show the identical invention in as complete detail as is contained in claim 1.

Claims 2 and 6 each depend from claim 1 and include the limitations of claim 1 by their dependency. As a result, appellant believes that the Examiner's rejection of claims 2 and 6 are improper since the Uke reference fails to show all the elements of claim 1 and also fails to show the identical invention in as complete detail as is contained in claims 1, 2 and 6.

8.4) The Examiner's 35 U.S.C. § 103(a) Rejection of Claims 3, 5, 7 and 8 (Pages 3-4 of Final Office dated May 1, 2003)

According to the Examiner and concerning claim 3, Uke discloses that the stiffness of the layers may be varied as desired. It would have been obvious to one of ordinary skill in the art to have varied the stiffness within the range claimed by Appellant if such a stiffness was desired by a particular batter.

With respect to claims 5 and 8, the Examiner contends Uke discloses that the bat layers may be constructed in various fashions as desired. Both tubular socks and sheet materials are commonly known methods of applying fiber reinforced composite layers and would obviously have been suitable for the ordinarily skilled artisan looking to construct Uke's bat depending on what material was more readily available or cheaper.

With respect to claim 7, the Examiner contends E-glass is commonly known and would have been suitable for use as Uke's fiberglass.

Regarding the rejection of claims 3, 5, and 7 Uke discloses the use of different resins and fibers in the barrel and handle as explained above. In response to Appellant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the knowledge generally available to one of ordinary skill in the art would lead one to use less stiff fibers if a more flexible bat was desired and stiffer fibers if a stiffer bat was desired given Uke's teaching that the fiber type may be varied as desired to obtain different stiffness values in the barrel and handle as desired. (See Col. 4, lines 18-22). Appellant's further suggestion that Uke teaches the non-use of fibers in the barrel when they are used in the handle is simply without merit. Uke specifically discloses the use of fibers in both sections at the same time. Note for example Col. 4, lines 14-19.

According to the Examiner, as to the "3 times" limitation of claim 3, the examiner considers it well within the realm of one of ordinary skill in the art to have stiffened the handle 3 times as much as the barrel if that was the feel desired by the batter. Uke specifically teaches that the materials should be varied to the desires of the feel requested by the batter.

Regarding claim 7 argument, the Examiner contends that the Appellant has not contested the fact that E-glass fibers are commonly known. Uke clearly teaches that other known fibers may be used as desired.

8.5) The Applicable Law for Rejections Under 35 U.S.C. § 103

According to M.P.E.P. § 2141, which cites Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986), the following tenets of patent law must be adhered to when applying 35 U.S.C. § 103. First, the claimed invention must be considered as a whole. Second, the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination. Third, the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention. Fourth,

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

obviousness is determined using a reasonable expectation of success standard. Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. *M.P.E.P.* § 2141 (citing *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966)).

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d, 488, 20 USPQ2d 1438 (Fed. Cir. 1991)).

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). The references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. *M.P.E.P.* § 2142 (citing *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)). In considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. *M.P.E.P.* § 2144.01 (citing *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968)). However, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

or motivation to make the proposed modification. M.P.E.P. § 2143.01 (citing In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

In order to take into account the inferences which one skilled in the art would reasonably make, the examiner must ascertain what would have been obvious to one of ordinary skill in the art at the time the invention was made, and not to the inventor, a judge, a layman, those skilled in remote arts, or to geniuses in the art at hand. *M.P.E.P.* § 2141.03 (citing *Environmental Designs, Ltd. v. Union Oil Co*, 713 F.2d 693, 218 USPQ 865 (Fed. Cir. 1983), *cert. denied*, 464 U.S. 1043 (1984)).

The examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the examiner must then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. Knowledge of applicant's disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the "differences," conduct the search and evaluate the "subject matter as a whole" of the invention. The tendency to resort to "hindsight" based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

M.P.E.P. § 2141.03.

8.6) The Appellant's Argument regarding the Rejection under 35 U.S.C. § 103(a) of Group 2 (Claim 3)

The Examiner's rejection under 35 U.S.C. § 103(a) based solely on the Uke reference is improper since the Examiner fails to make out a *prima facie* case of obviousness with respect to claim 3. According to the applicable law, in order to make out a prima facie case of obviousness, the reference must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

invention to have been obvious in light of the teachings of the reference. *M.P.E.P.* § 2142 (citing *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)). The applicable law also goes on to state that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *M.P.E.P.* § 2143.01 (citing *In re Gordon*, 733 F.2d 900, 221 USPO 1125 (Fed. Cir. 1984)).

Simply put, the Uke fails to teach or suggest all the elements of claim 3. Claim 3 depends from claim 1. Claim 1 recites "...a sleeve force fit within the hitting surface..." The sleeve 60 of Uke is outside of inner member 58. According to Uke, the "...second or outer tubular member 60 is a protective sleeve which engages telescopically over the inner member 58..." (See column 6, lines 35-38 of the Uke reference). The Uke reference does not teach or suggest a sleeve positioned within the hitting surface of the bat as recited in claim 1. Claim 3 includes the recitation of claim 1 by its dependency on that claim. In addition, claim 3 recites that "...the second stiffness is approximately 3 times the stiffness of the first stiffness." This additional element is also not taught by the Uke reference.

In addition, there is no suggestion or motivation to move the protective sleeve of Uke to a position within the hitting surface of the bat since repositioning the protective sleeve of Uke within the hitting surface would destroy a stated purpose of the Uke sleeve—namely to provide a protection to the core of the Uke bat. Since the proposed modification (moving the sleeve inside the batting surface) would render the prior art invention being modified unsatisfactory (sleeve is no longer protective) for its intended purpose, there is no suggestion or motivation to make the proposed modification. As a result, the Examiner has failed to make a prima facie case of obviousness using the Uke reference with respect to claim 3. Appellant respectfully submits that the rejection is improper and overcome.

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

Furthermore, since all the elements of claim 3 are not found in the reference, Appellant assumes that the Examiner is taking official notice of the missing elements. Appellant respectfully objects to the taking of official notice with a single reference obviousness rejection and, pursuant to M.P.E.P. § 2144.03, Appellant respectfully traverses the assertion of Official Notice and requests that the Examiner cite references in support of this position.

8.7) The Appellant's Argument regarding the Rejection under 35 U.S.C. § 103(a) of Group 3 (Claim 5)

The Examiner's rejection under 35 U.S.C. § 103(a) based solely on the Uke reference is improper since the Examiner fails to make out a *prima facie* case of obviousness with respect to claim 5. According to the applicable law, in order to make out a prima facie case of obviousness, the reference must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the reference. *M.P.E.P.* § 2142 (citing *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)). The applicable law also goes on to state that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *M.P.E.P.* § 2143.01 (citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

Simply put, the Uke fails to teach or suggest all the elements of claim 5. Claim 5 depends from claim 1. Claim 1 recites "...a sleeve force fit within the hitting surface..." The sleeve 60 of Uke is outside of inner member 58. According to Uke, the "...second or outer tubular member 60 is a protective sleeve which engages telescopically over the inner member 58..." (See column 6, lines 35-38 of the Uke reference). The Uke reference does not teach or suggest a sleeve positioned within the hitting surface of the bat as recited in claim 1. Claim 5

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

includes the recitation of claim 1 by its dependency on that claim. In addition, claim 5 recites that "...the first set of fibers includes a tubular sock." This additional element is also not taught by the Uke reference.

In addition, there is no suggestion or motivation to move the protective sleeve of Uke to a position within the hitting surface of the bat since repositioning the protective sleeve of Uke within the hitting surface would destroy a stated purpose of the Uke sleeve—namely to provide a protection to the core of the Uke bat. Since the proposed modification (moving the sleeve inside the batting surface) would render the prior art invention being modified unsatisfactory (sleeve is no longer protective) for its intended purpose, there is no suggestion or motivation to make the proposed modification. As a result, the Examiner has failed to make a prima facie case of obviousness using the Uke reference with respect to claim 5. Appellant respectfully submits that the rejection is improper and overcome.

Furthermore, since all the elements of claim 5 are not found in the reference, Appellant assumes that the Examiner is taking official notice of the missing elements. Appellant respectfully objects to the taking of official notice with a single reference obviousness rejection and, pursuant to M.P.E.P. § 2144.03, Appellant respectfully traverses the assertion of Official Notice and requests that the Examiner cite references in support of this position.

8.8) The Appellant's Argument regarding the Rejection under 35 U.S.C. § 103(a) of Group 4 (Claim 7)

The Examiner's rejection under 35 U.S.C. § 103(a) based solely on the Uke reference is improper since the Examiner fails to make out a *prima facie* case of obviousness with respect to claim 7. According to the applicable law, in order to make out a prima facie case of obviousness, the reference must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

invention to have been obvious in light of the teachings of the reference. *M.P.E.P.* § 2142 (citing *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)). The applicable law also goes on to state that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *M.P.E.P.* § 2143.01 (citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

Simply put, the Uke fails to teach or suggest all the elements of claim 7. Claim 7 depends from claim 1. Claim 1 recites "...a sleeve force fit within the hitting surface..." The sleeve 60 of Uke is outside of inner member 58. According to Uke, the "...second or outer tubular member 60 is a protective sleeve which engages telescopically over the inner member 58..." (See column 6, lines 35-38 of the Uke reference). The Uke reference does not teach or suggest a sleeve positioned within the hitting surface of the bat as recited in claim 1. Claim 7 includes the recitation of claim 1 by its dependency on that claim. In addition, claim 7 recites that "...the second fiber and second resin is an E-glass fiber impregnated resin." This additional element is also not taught by the Uke reference.

In addition, there is no suggestion or motivation to move the protective sleeve of Uke to a position within the hitting surface of the bat since repositioning the protective sleeve of Uke within the hitting surface would destroy a stated purpose of the Uke sleeve—namely to provide a protection to the core of the Uke bat. Since the proposed modification (moving the sleeve inside the batting surface) would render the prior art invention being modified unsatisfactory (sleeve is no longer protective) for its intended purpose, there is no suggestion or motivation to make the proposed modification. As a result, the Examiner has failed to make a prima facie case of obviousness using the Uke reference with respect to claim 7. Appellant respectfully submits that the rejection is improper and overcome.

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

Furthermore, since all the elements of claim 7 are not found in the reference, Appellant assumes that the Examiner is taking official notice of the missing elements. Appellant respectfully objects to the taking of official notice with a single reference obviousness rejection and, pursuant to M.P.E.P. § 2144.03, Appellant respectfully traverses the assertion of Official Notice and requests that the Examiner cite references in support of this position.

8.9) The Appellant's Argument regarding the Rejection under 35 U.S.C. § 103(a) of Group 5 (Claim 8)

The Examiner's rejection under 35 U.S.C. § 103(a) based solely on the Uke reference is improper since the Examiner fails to make out a *prima facie* case of obviousness with respect to claim 8. According to the applicable law, in order to make out a prima facie case of obviousness, the reference must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the reference. *M.P.E.P.* § 2142 (citing *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)). The applicable law also goes on to state that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *M.P.E.P.* § 2143.01 (citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

Simply put, the Uke fails to teach or suggest all the elements of claim 8. Claim 8 depends from claim 1. Claim 1 recites "...a sleeve force fit within the hitting surface..." The sleeve 60 of Uke is outside of inner member 58. According to Uke, the "...second or outer tubular member 60 is a protective sleeve which engages telescopically over the inner member 58..." (See column 6, lines 35-38 of the Uke reference). The Uke reference does not teach or suggest a sleeve positioned within the hitting surface of the bat as recited in claim 1. Claim 8 includes the

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

recitation of claim 1 by its dependency on that claim. In addition, claim 8 recites that "...the second set of fibers and resin is a sheet of material." This additional element is also not taught by the Uke reference.

In addition, there is no suggestion or motivation to move the protective sleeve of Uke to a position within the hitting surface of the bat since repositioning the protective sleeve of Uke within the hitting surface would destroy a stated purpose of the Uke sleeve—namely to provide a protection to the core of the Uke bat. Since the proposed modification (moving the sleeve inside the batting surface) would render the prior art invention being modified unsatisfactory (sleeve is no longer protective) for its intended purpose, there is no suggestion or motivation to make the proposed modification. As a result, the Examiner has failed to make a prima facie case of obviousness using the Uke reference with respect to claim 8. Appellant respectfully submits that the rejection is improper and overcome.

Furthermore, since all the elements of claim 8 are not found in the reference, Appellant assumes that the Examiner is taking official notice of the missing elements. Appellant respectfully objects to the taking of official notice with a single reference obviousness rejection and, pursuant to M.P.E.P. § 2144.03, Appellant respectfully traverses the assertion of Official Notice and requests that the Examiner cite references in support of this position.

Page 17 Atty. Docket 1470.001US1

APPELLANTS' BRIEF ON APPEAL

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

9. SUMMARY

It is respectfully submitted that the cited art fails to anticipate the inventions of claims 1, 2 and 6 and fails to render the inventions of claims 3, 5, 7 and 8 obvious and that, therefore, the claimed invention is patentable over the cited art. It is respectfully submitted that claims 1-3 and 5-8 should therefore be allowed. Reconsideration is respectfully requested. Reversal of the Examiner's rejections of claims 1-3 and 5-8 is also requested.

Respectfully submitted,

MATTHEW VACEK et al.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

Date: 4/5/04 By Olishard E

Richard E. Billion Reg. No. 32,836

<u>CERTIFICATE UNDER 37 CFR 1.8:</u> The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Appeal Brief, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this __5th ___ day of April, 2004.

Candis B. Buending

Name

Signature



Title: COMPOSITE SOFTBALL BAT

Page 18 Atty. Docket 1470.001US1

APPENDIX I

The Claims on Appeal

- 1. (Previously Presented) A bat comprising:
 - a hitting surface;
 - a handle element attached to the hitting surface; and
- a sleeve positioned within the hitting surface, wherein the hitting surface and the sleeve are comprised of composite materials;

wherein the hitting surface is made from a first set of fibers and a first resin and wherein the sleeve is made from a second set of fibers and a second resin, the second set of fibers and the second resin being different than the first set of fibers and first resin.

- 2. (Original) The bat of claim 1 wherein the hitting surface has a first stiffness and the sleeve positioned within the hitting surface has a second stiffness different than the first stiffness.
- 3. (Original) The bat of claim 1 wherein the hitting surface has a first stiffness and the sleeve positioned within the hitting surface has a second stiffness different than the first stiffness, wherein the second stiffness is approximately 3 times the stiffness of the first stiffness.
- 4. (Cancelled)
- 5. (Currently Amended NOT ENTERED) The bat of claim $\underline{1}$ [4] wherein the first set of fibers includes a tubular sock.
- 6. (Currently Amended NOT ENTERED) The bat of claim $\underline{1}$ [4] wherein the second fiber

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

and resin is impregnated in the second set of fibers.

7. (Original) The bat of claim 6 wherein the second fiber and second resin is an E-glass fiber impregnated resin.

8. (Currently Amended – NOT ENTERED) The bat of claim $\underline{1}$ [4] wherein the second set of fibers and resin is a sheet of material.

9. (Withdrawn) A method of forming a bat comprising:

forming a tubular hitting surface;

forming a sleeve from composite material; and

fitting the sleeve within the tubular surface.

10. (Withdrawn) The method of claim 9 wherein the step of fitting the sleeve within the tubular surface comprises force fitting the sleeve within the tubular hitting surface.

11. (Withdrawn) The method of claim 9 wherein the step of forming a sleeve from composite material comprises laying up a plurality of layers of material.

12. (Withdrawn) The method of claim 11 wherein laying up a plurality of layers of material further comprises laying up a first layer of material and a second layer of material at different angles.

13. (Withdrawn) The method of claim 11 wherein laying up a plurality of layers of material further comprises laying up a first layer of material and a second layer of material at different

Serial No. 09/883,790 Filed: June 18, 2001

Title: COMPOSITE SOFTBALL BAT

angles, wherein the angles of laying up are varied to change the nodes of vibration within the bat.

14. (Withdrawn) The method of claim 9 wherein the step of forming a sleeve from composite material comprises:

laying up a plurality of layers of material; and wrapping the plurality of layers about a mandrel.

15. (Withdrawn) The method of claim 9 wherein the step of forming a sleeve from composite material comprises:

laying up a plurality of layers of material; wrapping the plurality of layers about a mandrel; and wrapping tape over the plurality of layers about the mandrel.

16. (Withdrawn) The method of claim 14 wherein the step of wrapping tape includes: wrapping a first layer of tape to produce a release layer; and wrapping a second layer of tape to produce a strength layer.